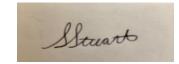
# **Treatment Intervention Advisory Committee Review and Determination**



Date: February 22, 2019

To: Wisconsin Department of Health Services

From: Wisconsin Department of Health Services Treatment Intervention Advisory Committee:

Shannon Stuart, Ph.D. (chairperson)

RE: Determination of Relationship Development Intervention (RDI) as a proven and effective

treatment for children and adults

☐ This is an initial review

☐ This is a re-review. Previously reviewed (rated) on November 7, 2011 (4), January 29, 2013 (4), November 22, 2013 (4), July 25, 2014 (4), July 31, 2015 (4), and October 28, 2016 (4).

No new research located; determination from October 2016 stands (details below)

### **Section One: Overview and Determination**

Please find below a statement of our <u>determination</u> as to whether or not the committee views Relationship Development Intervention (RDI) as a proven and effective treatment. In subsequent sections you will find documentation of our review process including a <u>description</u> of the proposed treatment, a <u>synopsis</u> of review findings, the <u>treatment review evidence checklist</u>, and a listing of the <u>literature</u> considered. In reviewing treatments presented to us by the Department of Health Services, we implement a review process that carefully and fully considers all available information regarding a proposed treatment. Our determination is limited to a statement regarding how established a treatment is with regards to quality research. The committee does not make decisions regarding funding.

### Description of proposed treatment

From the Autism Speaks website at https://www.autismspeaks.org/what-autism/treatment/relationship-development-intervention-rdi:

"Relationship Development Intervention® (RDI) is a family-based, behavioral treatment designed to address autism's core symptoms. Developed by psychologist Steven Gutstein, Ph.D., it builds on the theory that "dynamic intelligence" is key to improving quality of life for individuals with autism. Dr. Gutstein defines dynamic intelligence as the ability to think flexibly. This includes appreciating different perspectives, coping with change and integrating information from multiple sources (e.g. sights and sounds). RDI aims to help individuals with autism form personal relationships by gradually strengthening the building blocks of social connections. This includes the ability to form an emotional bond and share experiences."

It should be noted that the RDI Program is now being promoted/marketed as RDIconnect. This is a company that has expanded beyond ASD programs to include other populations. Besides expanding the

rage of populations served, RDIconnect provides consultant training, a "Family Guided Participation Program" a "Dynamic Education Program", and specifically ASD-focused programs. This is concerning, as there is no evidence of RDI's efficacy.

# Synopsis of current review (February 2019)

Committee members completing current review of research base: Jennifer Asmus and Tia Schultz

Please refer to the reference list (Section Four) which details the reviewed research.

No new empirical outcome research was found in the time period since the last review.

There was a new study (2016) that used RDI as part of it's evaluation focused on:

- 1. Examination of how far severity of autism, as assessed with the ADOS, corresponds with measures of the qualities of parent-child interaction in semi-structured cooperative activity.
- 2. Exploration of whether specific dyadic processes targeted for intervention in RDI were associated with the ADOS and with qualities of parent-child interaction.

The manuscript specified that "It is important to stress that this is not a study of the outcome of RDI." Therefore, this article was not summarized as new research.

Committee's Determination: After reviewing the research and applying the criteria from the Treatment Review Evidence Checklist, it is the decision of the committee that Relationship Development Intervention (RDI) retain an efficacy rating of Level 4 - Insufficient Evidence (Experimental Treatment).

#### Review history

(October 2016 - Roger Bass and Lana Collet-Klingenberg)

The committee's conclusions regarding RDI include:

- Empirical verification has not changed since the last review. Prior empirical inquiries lacked adequate control to make judgments regarding behavioral changes due to RDI techniques.
- Other authoritative reviews indicate that RDI is unsupported.
- Alternative procedures exist that are empirically stronger

It is the decision of the committee that Relationship Development Intervention (RDI) retain an efficacy rating of Level 4 - Insufficient Evidence (Experimental Treatment).

(July 2015 - Shannon Stuart and Roger Bass)

The committee's conclusions regarding RDI include the fact this this re-review is expanded by one article (Earbart & Zamora 2015), however:

• The design lacks controls to make judgments regarding behavioral changes due to the RDI technique.

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- The data did not measure specific elements of the program or dependent variable properties to allow for analysis of any co-variation.
- The procedure's description lacked detail necessary for replication.
- The one subject's data that was presented was selected by the authors—it was not randomly selected.
- No comparison groups/individuals were evaluated, so relative changes across treated and untreated children cannot be discerned.

(July 2014 - Roger Bass and Jeff Tiger)

The committee's conclusions regarding Relationship Development Intervention (RDI) include:

• This re-review is expanded by one article (Zane 2013)—a theoretical piece that adds nothing to the sparse empirical literature reported previously. A summary of those previously reviewed materials is included to give context for this re-review' determination.

(November 2013 - Roger Bass and Maribeth Gettinger)

To date, no independent studies have been published on RDI. In 2007, Dr. Gutstein and colleagues published an evaluation report in the journal Autism. This study reported positive pretest-to-posttest gains in a small group of 16 children (no comparison group). Aside from this single published report (which is methodologically weak), there is no existing research base for concluding that RDI has been proven to be effective. Other reviewers and authoritative bodies have also noted the lack of comparative studies evaluating RDI and similarly concluded that RDI lacks sufficient evidence as a treatment for ASD.

(January 2013)

No new peer-reviewed research identified.

(November 2011)

In the case of RDI, its developer conducted the only available research specific to only RDI; the primary citation for that research is:

Gutstein, S.E., Burgess, A.F., Montfort, K. (2007). Evaluation of the Relationship Development Intervention, Autism, 11, 397-411.

The committee's conclusions regarding RDI include:

- There is insufficient data to draw meaningful conclusions about its efficacy.
- Gutstein and colleagues refer to an evidence base of research related to specific components of RDI, such as joint attention, but our inquiries into that research find that the specific components have not been tested as part of the comprehensive treatment package of RDI.

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In sum, given the general lack of empirical support for RDI, as well as research directly related to RDI as a comprehensive treatment package, it is our decision that RDI has insufficient evidence at this time to be considered a proven and effective treatment. While we do not believe it is a harmful practice, at this time, this committee considers it an experimental practice.

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# Section Two: Rationale for Focus on Research Specific to Comprehensive Treatment Packages (CTP) or Models

In the professional literature, there are two classifications of interventions for individuals with Autism Spectrum Disorder (National Research Council, 2001; Odom et al., 2003; Rogers & Vismara, 2008):

- (a) **Focused intervention techniques** are individual practices or strategies (such as positive reinforcement) designed to produce a specific behavioral or developmental outcome, and
- (b) **Comprehensive treatment models** are "packages" or programs that consist of a set of practices or multiple techniques designed to achieve a broader learning or developmental impact.

To determine whether a treatment package is proven and effective, the Treatment Intervention Advisory Committee (TIAC) will adopt the following perspective as recommended by Odom et al. (2010):

The individual, focused intervention techniques that make up a comprehensive treatment model may be evidence-based. The research supporting the effectiveness of separate, individual components, however, does *not* constitute an evaluation of the comprehensive treatment model or "package." The TIAC will consider and review only research that has evaluated the efficacy of implementing the comprehensive treatment *as a package*. Such packages are most often identifiable in the literature by a consistently used name or label.

- National Research Council. (2001). *Educating children with autism*. Washington, DC: National Academy Press.
- Odom, S. L., Brown, W. H., Frey, T., Karusu, N., Smith-Carter, L., & Strain, P. (2003) Evidence-based practices for young children with autism: Evidence from single-subject research design. *Focus on Autism and Other Developmental Disabilities*, 18, 176-181.
- Odom, S. L., Boyd, B. A., Hall, L. J., & Hume, K. (2010). Evaluation of comprehensive treatment models for individuals with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 40, 425-436.
- Rogers, S., & Vismara, L. (2008). Evidence-based comprehensive treatments for early autism. *Journal of Clinical Child and Adolescent Psychology*, 37, 8-38.

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# **Section Three: TIAC Treatment Review Evidence Checklist**

Name of Treatment: Relationship Development Intervention

<u>Lev</u>	el 1- Well Established or Strong Evidence (DHS 107 - Proven & Effective Treatment)	
	Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, National Professional Development Center) have approved of or rated the treatment package as having a strong evidence base; authorities are in agreement about the level of evidence.	
	There exist ample high quality studies that demonstrate experimental control <u>and</u> favorable outcomes of treatment package.	
	<ul> <li>☐ Minimum of two group studies or five single subject studies or a combination of the two.</li> <li>☐ Studies were conducted across at least two independent research groups.</li> <li>☐ Studies were published in peer reviewed journals.</li> </ul>	
	There is a published procedures manual for the treatment, or treatment implementation is clearly defined (i.e., replicable) within the studies.	
	Participants (i.e., N) are clearly identified as individuals with autism spectrum disorders or developmental disabilities.	
Notes: At this level, include ages of participants and disabilities identified in body of research		
<u>Level 2 – Established or Moderate Evidence (DHS 107 - Proven &amp; Effective Treatment)</u>		
	Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, NPDC) have approved of or rated the treatment package as having at least a minimal evidence base; authorities may not be in agreement about the level of evidence.	
	There exist at least two high quality studies that demonstrate experimental control <u>and</u> favorable outcomes of treatment package.	
	<ul> <li>☐ Minimum of one group study or two single subject studies or a combination of the two.</li> <li>☐ Studies were conducted by someone other than the creator/provider of the treatment.</li> <li>☐ Studies were published in peer reviewed journals.</li> </ul>	
	Participants (i.e., N) are clearly identified as individuals with autism spectrum disorders or	

Notes: at this level, include ages of participants and disabilities identified in body of research

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Leve	el 3 – Emerging Evidence (DHS 107 – Promising as a Proven & Effective Treatment)	
	Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, NPDC) have recognized the treatment package as having an emerging evidence base; authorities may not be in agreement about the level of evidence.  There exists at least one high quality study that demonstrates experimental control and favorable outcomes of treatment package.  May be one group study or single subject study.  Study was conducted by someone other than the creator/provider of the treatment.  Study was published in peer reviewed journal.	
Ш	Participants (i.e., N) are clearly identified as individuals with autism spectrum disorders or developmental disabilities.	
Notes: At this level, include ages of participants and disabilities identified in body of research		
Leve	el 4 – Insufficient Evidence (Experimental Treatment)	
	Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, NPDC) have not recognized the treatment package as having an emerging evidence base; authorities are in agreement about the level of evidence. There is not at least one high quality study that demonstrates experimental control and favorable outcomes of treatment package.	
	Study was conducted by the creator/provider of the treatment.	
	Study was conducted by the creator/provider of the treatment.	
$\boxtimes$	Participants (i.e., N) are not clearly identified as individuals with autism spectrum disorders or developmental disabilities.	
Notes:		
Levi	el 5 – Untested (Experimental Treatment) &/or Potentially Harmful	
Ш	Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, NPDC) have not recognized the treatment package as having an emerging evidence base; authorities are in agreement about the level of evidence.	
	There are no published studies supporting the proposed treatment package.	
	There exists evidence that the treatment package is potentially harmful.  ☐ Authoritative bodies have expressed concern regarding safety/outcomes.  ☐ Professional bodies (i.e., organizations or certifying bodies) have created statements regarding safety/outcomes.	
Note	es: At this level, please specify if the treatment is reported to be potentially harmful, providing	

documentation

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### **References Supporting Identification of Evidence Levels:**

- Chambless, D.L., Hollon, S.D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66(1) 7-18.
- Chorpita, B.F. (2003). The frontier of evidence---based practice. In A.E. Kazdin & J.R. Weisz (Eds.). *Evidence-based psychotherapies for children and adolescents* (pp. 42---59). New York: The Guilford Press.
- Odom, S. L., Collet-Klingenberg, L., Rogers, S. J., & Hatton, D. (2010). Evidence-based practices in interventions for children and youth with autism spectrum disorders. *Preventing School Failure*, 54(4), 275-282.

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### **Section Four: Literature Review**

### Literature reviewed for current determination:

Hobson, J. A., Tarver, L., Beurkens, N., & Hobson, R. P. (2016). The relation between severity of autism and caregiver-child interaction: A study in the context of Relationship Development Intervention. Journal of Abnormal Child Psychology, 44 (4), 745-755.

Note that this study does not examine outcome of RDI.

## Literature reviewed for previous determinations:

Earbart, J., Zamora, I. (2015). Achievement together: the development of an intervention using relationship-based strategies to promote positive learning habits. Infants and Young Children, 28(1), 32-45.\*

Gutstein, S.E., Burgess, A.F., & Montfort, K. (2007). Evaluation of the Relationship Development Intervention program. Autism, 11(5), 397-411.

Zane, T. Relationship Development Intervention: A review of its effectiveness. Association for Science in Autism Treatment. (Review of Gutstein et al., 2007). Retrieved July 3, 2013 from http://www.asatonline.org/resources/articles/rdi.htm

\*Note that ASD clients may have been included in this study in the aggregate, but whether the client whose data are discussed was ASD is not included.

#### **JULY 2014**

Empirical studies were sought in these references and within their references for the July 2014 review:

Gutstein, Steven E. Autism/Aspergers: Solving the Relationship Puzzle. Arlington, TX: Future Horizons, 2000. Accessed September 20, 2012.

Gustein, Steven E. "Relationship Develop Intervention: Developing a Treatment Program to Address the Unique Social and Emotional Deficits in Autism Spectrum Disorders." Autism Spectrum Quarterly (Winter 2005): 8-12. Accessed September 20, 2012. http://colotraining....Quarterly11.pdf.

"Relationship Development Intervention." Autism Speaks, Inc. Accessed September 20, 2012. http://www.autismspe...ntervention-rdi.

Boll, Michael. "Episode 32: Dr. Steve Gutstein Creator of RDI, Relationship Development Intervention." AutismPodcast. August 6, 2006. Accessed September 20, 2012. http://www.autismpod...n&submit=Search.

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Gutstein, Steven E., Hannah R. Gutstein, and Carlotta Bird. My Baby can Dance: Stories of Autism, Asperger's and Success through the Relationship Development Intervention (RDI®) Program, Houston, TX: Connections Center Publishing. Accessed September 20, 2012.

"Relationship Development Intervention® (RDI®)." Raising Children Network. Accessed September 20, 2012. http://raisingchildr...les/rdi th.html.

"Autism Therapies: ABA, RDI, and Sensory Therapies." WebMD. Accessed September 20, 2012. http://www.webmd.com...nsory-therapies.

Boll, Michael. "Episode 42: RDI Consultant Maisie Soetantyo." AutismPodcast. October 5, 2006. Accessed September 20, 2012. http://www.autismpod...n&submit=Search.

"Consultant Training Program." RDIconnect. Accessed September 20, 2012. http://www.rdiconnec...ng-Program.aspx.

National Standards Project. Massachusetts: National Autism Center, 2009. Accessed September 20, 2012. http://www.nationala... Report FIN.pdf.

Gutstein, Steven E., A.F. Burgess, K. Montfort. "Evaluation of the Relationship Development Intervention Program. Abstract. Autism 11, no. 5. (September 2007): 397-411. Accessed September 20, 2012. http://www.ncbi.nlm....pubmed/17942454.

Gutstein S. (In Press). "Preliminary Evaluation of Relationship Development Intervention." Journal of Autism and Developmental Disorders. Accessed September 20, 2012. http://faculty.caldw... manuscript.pdf.

"Find a Consultant." RDIconnect. Accessed September, 20, 2012. https://www.rdiconne...Consultant.aspx.

The handbook Relationship Development Intervention with Young Children Social and Emotional Development Activities for Asperger Syndrome, Autism, PDD and NLDSteven E. Gutstein and Rachelle K. Sheely describe numerous RDI techniques but cite not one study. The basic premise is that creating friendship is critical and that the procedures described within do that.

The Texas Guide for Effective Teaching (http://www.txautism.net/uploads/target/RDI.pdf) indicates that only one study looked at RDI—the one Zane critiqued for ASAT (see above).

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